



# Environmental Liquid Membrane System

## Technical Data Sheet

### ***Environmental Liquid Membrane System Natural Masonry Jacket***

Natural Oil Based Waterproofing Membrane for Stone and Masonry Application

#### **DESCRIPTION**

The **Environmental Liquid Membrane System (ELMS™)** is a natural agricultural oil based coating that can be applied in a one coat application for various waterproofing applications over stone, brick, and masonry structures where latent moisture or ponding water may exist. **ELMS™** provides many outstanding benefits including: low VOC; environmentally friendly; meets current and future EPA requirements; outstanding UV resistance; permanent stain, mildew, and mold resistance and can be applied over aged and unaged asphaltic substrates as well.

*Each application has unique requirements and as such may require a specific system configuration and application. It is recommended that you contact Green Products, Inc. for technical services to assess the proper use of any product within a roof system configuration or for roof systems approvals.*

#### **TYPICAL PHYSICAL PROPERTIES**

<u>PROPERTY</u>	<u>VALUE</u>	<u>TEST METHOD</u>
Viscosity	20,000 – 100,000 cps	
Solids Content, min.	87%	ASTM D 2697 (86)
Flash Point, min.	Mineral Spirits 314-390F	
Peel / Adhesion	98% cohesiveness	ASTM C 794
Low temperature flexibility	No loss of adhesion or cracking. Unaffected	ASTM C 734
UL Flame Spread	CFS=5, SDI=0 – Class A Interior Flame Spread Approved	ASTM E 84-01
Permeability	Zero Perms	ASTM 398
Ultraviolet Exposure 10,000 hrs UV and Moisture	No cracking, checking, loss of flexibility or discoloration	ASTM 822
Water Swelling % after 1wk/4wks	1 Week-0% / 4 weeks-0%	
Blistering on Mod. Bit. after 14 days under water	Excellent (none)	
VOC	1.8 lbs. per gallon	
Fungus Resistance	No growth or discoloration	
Sag Resistance	.3 inch	ASTM D 4400

#### **PRODUCT USES**

**ELMS™** is recommended as a waterproofing system for restoration and repair of brick, split face block, limestone, terra cotta, and numerous other stone and masonry substrates. Additionally, **ELMS™** is specially formulated for waterproofing applications where latent or ponding water may exist.





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## COVERAGE

Coverage rates required to qualify for extended warranties range from 1.5 - 4 gal/sq (0.6 - 1.6 l/sq/m).

When applied at a rate of 2-gal/sq (0.8 l/m), The theoretical wet film thickness should be 30 mils of thickness and a dry film thickness should be 27 mils.

## COLOR

Standard color is highly reflective white. Custom colors and clear coat are available upon request for a nominal fee.

## STORAGE STABILITY

One-year minimum when stored in unopened containers at 30° - 80° F

## CLEAN UP

Mineral Spirits – Rule 66

## PRIMER

None.

## CURE TIMES

When applied at 30 wet mils (762 microns) coating thickness and at conditions of 75° F (24° C) and 50% relative humidity, **ELMS™** dry to the touch in 2 hours and should reach final cure in 24 hours. Colder weather and/or higher humidity will retard curing whereas warmer weather and/or lower humidity will accelerate curing.

## APPLICATION INSTRUCTIONS

**ELMS™** is supplied ready to use. Onsite product mixing is not necessary if used within 4 months of manufacture date. All special colors must be mixed prior to application to assure that pigments have not settled. **ELMS™** may be applied by brush, roller, or conventional or airless spray equipment. Though cold weather applications do not deter the usage of the **ELMS™** product on a properly prepared and dry surface, application lower than 30° F may deter the use of spray equipment due to viscosity changes at lower temperatures.

For airless spray application, **ELMS™** can be sprayed at pressures from 2500 - 4000 psi. A "typical" airless spray unit would consist of the following:

- A material transfer pump for air motor driven sprayers: 1:1-5:1 compression ratios or a drum siphon for self-contained gas-hydraulic sprayers.
- Basic spray pump capable of developing a minimum of 1500 psi working pressure.
- 200 - 300 ft. of 1/2" high-pressure hose, 3/8" whip optional.

**NOTE: Any airless spray gun designed to operate in the same working spray unit contemplated for use with Green Products, Inc. coatings should be used only by experienced professional spray mechanics trained in the safe operation of the high-pressure airless equipment. All equipment should conform to the most recent OSHA safety standard. Contact Green Products, Inc. regarding specific application criteria and instruction.**

The information contain herein is believed to be reliable. All recommendations or suggestions are made without guarantee in as much as conditions and methods of commercial use are beyond our control. Properties given are typical values and are not specifications unless otherwise stated.

**ELMS™**

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